

RECORDS OF CYCLOPOID AND HARPACTICOID  
COPEPODS (CRUSTACEA) FROM A SPRING  
IN WASHINGTON, D.C.

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*Abstract.*—The copepods *Acanthocyclops vernalis* (Fischer) and *Eucyclops agilis* (Koch) (Cyclopoida) and *Attheyella* (*Mrazekiella*) *illinoisensis* (S. A. Forbes) and *Attheyella* (*M.*) *spinipes* Reid (Harpacticoidea) were collected from a spring in Fort Mahan Park, Washington, D.C. Individuals of the Fort Mahan Park population of *A. spinipes* varied morphologically in some respects from the type population, described from a spring in Rock Creek Stream Valley Park, Maryland.

Messrs. Stephen W. Syphax and Bernard Raftery of the National Park Service brought a sample of leaves and detritus collected from a spring seepage at Fort Mahan, Washington, D.C., to Dr. Thomas E. Bowman, Department of Invertebrate Zoology, National Museum of Natural History (USNM), for determination of aquatic invertebrates present. In the sample was an amphipod, *Stygobromus tenuis* (Smith) (det. Dr. John R. Holsinger) and four species of copepods (Crustacea). Individuals of *Acanthocyclops vernalis* (Fischer) and *Attheyella* (*Mrazekiella*) *spinipes* Reid were abundant, and several individuals of *Eucyclops agilis* (Koch) and *Attheyella* (*M.*) *illinoisensis* were also present. The distribution of urosomal papillae and the spination formula in the specimens of *A. illinoisensis* agree with those of a male from a spring in Rock Creek Park, Maryland (Reid 1987). Some morphological variations of the Fort Mahan population of *A. spinipes* from the type population are described below.

*Attheyella* (*Mrazekiella*) *spinipes*

Reid

Figs. 1-3

*Material.*—2 ♀ and 11 ♂, dissected, and 90+ ♀ and ♂, alcohol-preserved, USNM

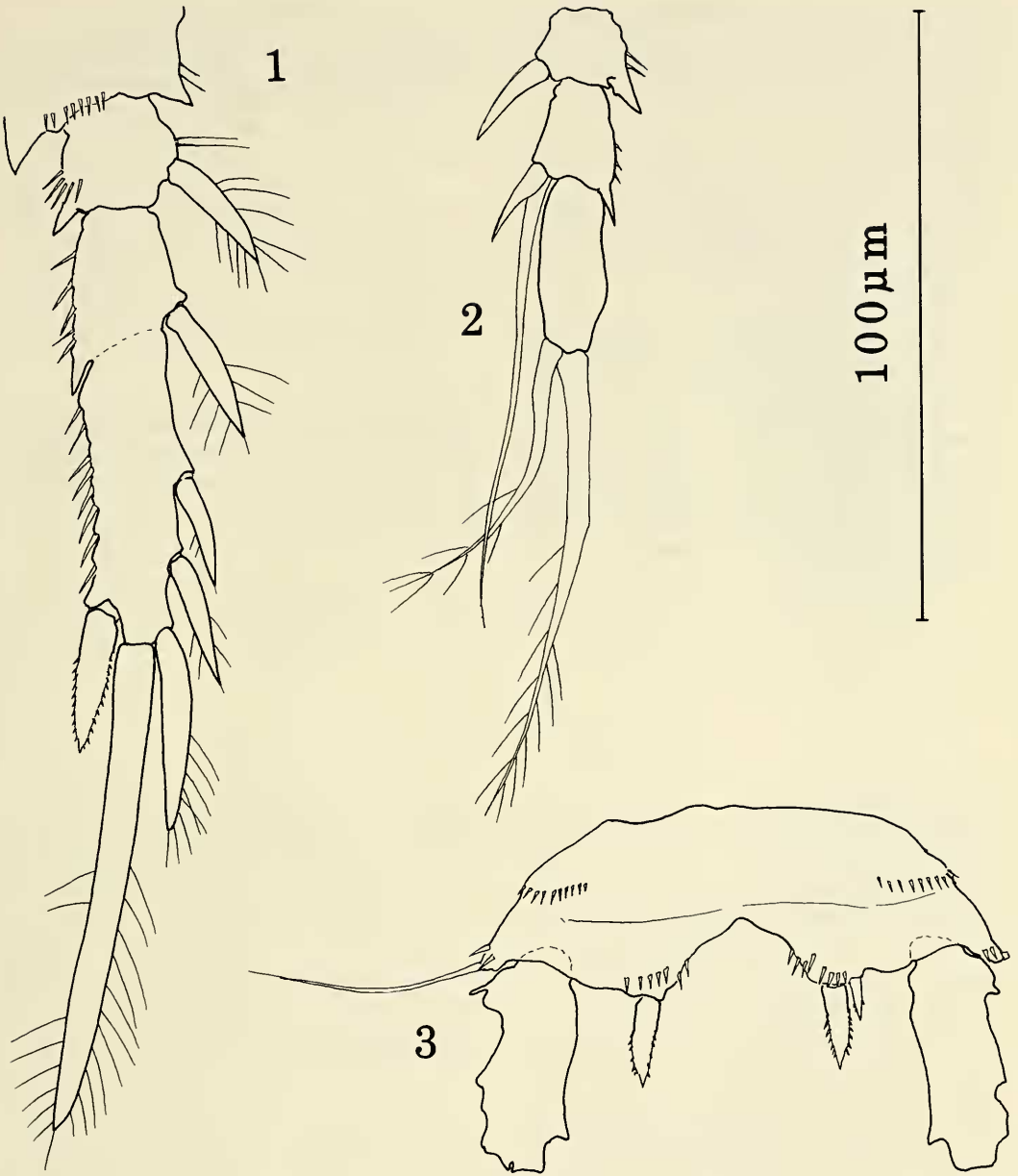
234102. All collected 26 Jun 1987 by S. W. Syphax and B. Raftery from sediment and leaves in spring seepage at Fort Mahan Park, 42d and Clay Streets, S. E., Washington, D.C., 38°53'44"N, 76°56'34"W, in drainage basin of Watts Branch, an affluent of the Anacostia River.

*Description.*—Endopods of legs 2 and 3 of females and leg 2 of males appeared to consist of 2 articles only, since the joint (represented as a dotted line in Fig. 1) between articles 2 and 3 was visible indistinctly and only on the anterior surface. The acute distolateral process of article 2 was present in all specimens. If these endopods are taken to consist of 2 articles, the setation formula for major armament becomes, in the female:

Leg 2    enp 1-0; 3,1,1  
Leg 3    enp 1-1; 3,2,1

In the population from the type locality, a spring in Rock Creek Park, Maryland (Reid 1987), these joints are distinct and the endopods clearly consist of 3 articles. No variability in major setation was observed in either population.

In all males from the Fort Mahan spring, endopods of leg 3 consist of 3 distinct ar-



Figs. 1–3. *Attheyella (Mrazekiella) spinipes* Reid, specimens from Fort Mahan spring: 1, Female: Leg 3, endopod, anterior; 2–3, Male: 2, Leg 3, endopod, posterior; 3, Leg 5, fused basipods, anterior.

ticles (Fig. 2). Article 2 bears a spine inserted posteriorly to the long slender apophysis. The apophysis bears 2 minute barbs near its tip; such barbs could not be distinguished in males from the type population. In most

males from Fort Mahan, both terminal setae of leg 3 are bent medially.

A male from the type population bears 2 spines on the medial expansion of one basipod of leg 5, but only the larger medial

spine on the other basipod. Of 11 dissected males from the Fort Mahan population, only 2 bear 2 spines on each basipod; 2 bear 1 spine on one basipod and 2 on the other; and 7 possess only 1 spine on each basipod. In each case, the stouter medial spine is retained. The fused basipods appear somewhat broader than previously interpreted, and bear rows of spinules on the ventral surface (Fig. 3).

Variability in major and minor armament and even articulation of swimming legs is common within species of harpacticoid copepods and more specifically in the genus *Attheyella* (Coker 1934; Wilson & Yeatman 1958). Workers should be aware of the possibility of such variability when making species determinations and when constructing keys.

### Literature Cited

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